**Mixed Practice Worksheet Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Factoring:** | GCF | Trinomials w/  Coeff. = 1 | Trinomials w/  Coeff. ≠ 1 | Factor by  Grouping | Factor Polynomials of higher degrees (cubes, 4th power) |

**Factor:**

1. 25x4 – 9 2. 3x2 – 6x + 12

3. 9xy + 12yz – 3y 4. x2 – 6x + 8

5. x3 + x2 – 4x – 4 6. 3x3 – 2x2 – 9x + 6

7. x4 + 2x3 + x + 2 8. 24x6y + 48x4y4 + 32x4y2z2

9. 36x4 – 9x2 10. 5xy2 + 20xy – 15x3y4

11. 2x3 – 3x2 – 10x + 15 12. x4 – 1

13. 6x2 + 15x 14. x2 + 13x + 42

15. 3x2 + 11x + 6 16. 2x3 – 32x

17. 48x4 – 4x3  18. 12x4 + 12x2 – 24

19. 2x2 – 5x – 12 20. x2 + 10x + 25

21. 81x2 – 216 22. 14x4 + 2x3

23. 27x3 – 8 24. x2 – 14x + 48

25. 8x2 – 100 26. 16x2y2 + 2xy – 8x2y3

27. 3x2 – 3y – 9 28. a3 – b3